

The opinion in support of the decision being entered today was *not* written for publication and is *not* binding precedent of the Board.

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte RONALD L. BROOKSHIRE and TRAVIS J. BROOKSHIRE

Appeal 2006-2311
Application 10/676,593
Technology Center 3600

Decided: May 25, 2007

Before EDWARD C. KIMLIN, BRADLEY R. GARRIS, and
JEFFREY T. SMITH, *Administrative Patent Judges*.

GARRIS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal involves claims 1-3 and 5-20, the only claims pending in this application. We have jurisdiction over the appeal pursuant to 35 U.S.C. § 134.

We AFFIRM.

INTRODUCTION

Appellants claim a solar-powered system and method for extracting gas from a landfill well (Claims 1 and 9). The system includes a fan powered with direct current (DC) from a rechargeable lead acid battery (Specification 4). The lead acid battery is recharged using a solar panel (Specification 4).

Claims 1, 5, and 9 are illustrative:

1. A landfill gas extraction system, comprising:

at least one fan module configured for communicating with methane in the landfill;

at least one fan disposed in the fan module to extract methane out of the landfill when the fan module is engaged with a landfill well of the landfill and the fan is activated;

at least one battery for powering the fan;

at least one solar panel electrically connected to the battery to recharge the battery, the fan module comprising:

a fan pipe holding the fan and first and second flanges engaged with opposite ends of the fan pipe for mating with respective flanges of a landfill well, the fan being disposed between the flanges.

5. The system of Claim 1, further comprising at least one support rod extending through at least two flanges.

9. A method for extracting gas from a landfill well, comprising:

installing a fan module in the well, the fan module containing at least one DC-powered fan;

energizing the fan using at least one battery to cause fluid to be exhausted from the well; and recharging the battery using at least one solar cell.

The Examiner relies on the following prior art references as evidence of unpatentability:

Bates	US 98,833	Jan. 11, 1870
West	US 349,549	Sep. 21, 1886
Finley	US 776,310	Nov. 29, 1904
Staler	US 4,453,119	Jun. 5, 1984
Adkins, II	US 5,131,888	Jul. 21, 1992
Longo, Sr.	US 5,857,807	Jan. 12, 1999

The rejections as presented by the Examiner are as follows:

1. Claims 1-3 and 7 are rejected under 35 U.S.C. § 102(b) as anticipated by or, in the alternative, under 35 U.S.C. § 103(a) as obvious over Adkins, II.
2. Claims 6 and 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Adkins, II in view of Staler.
3. Claim 5 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Adkins, II in view of Finley, West, or Bates.
4. Claims 9, 12-15, 17, and 18 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Longo, Sr. in view of Adkins, II.
5. Claims 11, 16, and 20 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Longo, Sr. in view of Adkins, II and further in view of Staler.
6. Claims 10 and 19 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Longo, Sr. in view of Adkins, II and further in view of Finley, West, or Bates.

Rather than reiterate the respective positions advocated by the Appellants and by the Examiner concerning these rejections, we refer to the Brief and to the Answer respectively for a complete exposition thereof.

Appellants separately argue claims 1, 5, 9, and 15. Accordingly, we address the arguments regarding those claims in our opinion below.

OPINION

35 U.S.C. § 102(b)/103(a) REJECTION OVER ADKINS, II

Appellants argue two distinctions with regard to claim 1. First, Appellants argue that Adkins, II does not teach or suggest that the fan is “disposed between the flanges” as required by claim 1 (Br. 2-3). Second, Appellants argue that Adkins, II does not teach or suggest “that the fan module is configured for engaging a landfill well” (Br. 2).

For the reasons discussed below, we are unpersuaded by Appellants’ arguments.

Regarding Appellants’ first argued distinction, Adkins, II discloses a solar powered exhaust fan (12) that is enclosed in a fan housing (13) (figure 1). The Examiner contends that Adkins, II’s figure 3 shows that fan (12) is housed within fan housing (13) such that it is between the flanges (13’ and 13”) (Answer 10). We agree with the Examiner.

Adkins, II’s figure 3, the side view of the exhaust fan, clearly shows that the fan (12) does not extend outside of fan housing (13) or past flanges (13’ and 13”) located at the top and bottom of the fan housing (13) (figures 2 and 3). Accordingly, we find that Adkins, II discloses Appellants’ first argued distinction.

Regarding Appellants’ second argued distinction, we find Adkins, II discloses a solar powered exhaust fan having the same structural features claimed by Appellants. In fact, Appellants do not argue that Adkins, II fails to disclose any specific structural feature of claim 1. Rather, Appellants

focus on the functional language “configured for communicating with methane *in the landfill*” and argues that the claim phrase indicates that “the flanges of the pipe [*sic* fan] module must have a structural quality that is defined in terms of what the structural quality must accomplish [i.e., its function], namely, mating with a specific structure –landfill well flanges” (Br. 3). However, the absence of disclosure relating to function does not defeat a finding of anticipation. *In re Schreiber*, 128 F.3d 1473, 1478-79, 44 USPQ2d 1429, 1431-32 (Fed. Cir. 1997).

Furthermore, because Adkins, II’s solar-powered exhaust fan is structurally identical to Appellants’ claimed solar-powered fan, we determine that Adkins, II’s fan is inherently capable of attachment to a landfill well to aid in methane removal. *Id.* Appellants bear the burden of demonstrating that Adkins, II’s solar-powered exhaust fan is not inherently capable of performing the claimed function (i.e., attachment to a landfill well). *Id.*

In an attempt to satisfy their burden, Appellants argue that their flanges have a “structural quality,” namely, “mating with a specific structure – landfill well flanges,” that is implied by their recited function (Br. 3). However, Appellants are required to show that “the prior art structure [i.e., Adkins, II’s solar powered exhaust fan] . . . [does] not inherently possess the functionally defined limitations of . . . [the] claimed apparatus.” *Schreiber*, 128 F.3d at 1478, 44 USPQ2d at 1432. Appellants have not made this showing. As such, Appellants have not satisfied this burden.

Because we find that Adkins, II discloses both of Appellants’ argued distinctions, with Adkins, II’s disclosure of the non-argued claim features not being in dispute, we find claim 1 to be anticipated. Accordingly, we

sustain the Examiner's § 102(b) rejection of claim 1. We sustain the Examiner's § 103(a) rejection of claim 1 as well. *In re Fracalossi*, 681 F.2d 792, 794, 215 USPQ 569, 572 (CCPA 1982) (*explaining* anticipation is the epitome of obviousness).

Accordingly, we affirm the Examiner's § 102(b)/103(a) rejections of argued claim 1 and non-argued claims 2-3 and 7 over Adkins, II.

35 U.S.C. § 103(a) ADKINS, II IN VIEW OF FINLEY, WEST OR BATES

Appellants argue that there is no motivation from the prior art to combine either Finley's bolts (6), West's rods (I), or Bates' two side-screw rods (J) with Adkins, II's attachment of the flanges (13' and 13'') of the fan housing (13) to pipe adaptor (17) and exhaust pipe (21) (Br. 4-5).

We are not persuaded by Appellants' argument for the reasons below.

First, Adkins, II discloses that the pipe adaptor (17) and exhaust pipe (21) are attached to flange 13' and flange 13'', respectively, of the fan housing 13 "by means well known in the art, such as bolts, screws, welding, and the like" (Adkins, II col. 3, ll. 8-11, 60-63). Thus, Adkins, II provides explicit motivation for combining Finley's bolts (6), West's rods (I), or Bates' "two side-screw rods" (J) to attach Adkins, II's flanges (13' and 13'') of the fan housing (13) to pipe adaptor (17) and exhaust pipe (21).

Second, Finley, West, or Bates discloses using "at least one support rod extending through at least two flanges" (claim 5) is a well known means to connect two pipes with an intermediate section of pipe (Finley 1, ll. 70-87; West 1, ll. 61-91; Bates col. 2, ll. 29-36). Moreover, similar to Adkins, II's description of the attachment means noted above, Finley and West describe the rod connection means as being "bolts" or "bolt-rods,"

respectively (Finley 1, l. 86; West 1, l. 61), thus providing additional motivation for the combination.

Therefore, contrary to Appellants' argument, Adkins, II's disclosure and Finley, West, or Bates disclosure to use "bolts," "bolt-rods," or "two sided screw rods" to attach pipe flanges provide motivation for using "at least one support rod [e.g., bolt] extending through at least two flanges" (claim 5) to connect the exhaust pipe 21 and pipe adaptor 17 to the flanges (13' and 13") of the fan housing 13, namely, to provide attachment of the pipes to the fan housing. Such motivation comes from both the knowledge of one of ordinary skill in the art and the teachings of the prior art noted above. *In re Rouffet*, 149 F.3d 1350, 1357, 47 USPQ2d 1453, 1457-58 (Fed. Cir. 1998). Furthermore, a teaching, suggestion, or motivation to combine the relevant prior art teachings does not have to be found explicitly in the prior art, as the teaching, suggestion, or motivation may be implicit from the prior art as a whole. *In re Kahn*, 441 F.3d 977, 988, 78 USPQ2d 1329, 1336; cited with approval in *KSR Int'l. Co. v. Teleflex Inc.*, 127 S. Ct. 1727, 1741, 82 USPQ2d 1385, 1396 (2007).

Accordingly, we affirm the Examiner's § 103(a) rejection of claim 5 over Adkins, II in view of Finley, West, or Bates.

35 U.S.C. § 103(a) REJECTION OVER LONGO, SR. IN VIEW OF ADKINS, II

Appellants argue that there is no motivation for combining Adkins, II's solar-powered exhaust fan with Longo, Sr.'s method or apparatus for removing methane from a landfill (Br. 5-6). Appellants contend that the Examiner has relied on impermissible hindsight in reaching his conclusion that it would have been obvious to combine Adkins, II's solar-powered

exhaust fan with Longo, Sr.'s method and apparatus for removing methane from a landfill (Br. 6-7). Appellants further contend that they are the first to recognize that the electrical infrastructure to use a conventional hard-wired fan on a landfill may be lacking and prohibitively expensive to install, such that the solution they provide, to use a solar-powered fan in a landfill setting, is nonobvious (Br. 6).

We cannot agree with Appellants' arguments for the reasons discussed below.

Longo, Sr. discloses using a blower 28 to provide positive suction to remove methane from wells 26 in a landfill (Longo, Sr. col. 3, l. 64 to col. 4, l. 2 and figure 1). Adkins, II discloses a solar-powered exhaust fan that is "portable and modular in construction," "inexpensive and easy to fabricate," and easy to install (Adkins, II col. 2, ll. 19-23, 27-28).

From these disclosures, Adkins, II provides motivation to substitute his solar-powered fan for Longo, Sr.'s blower 28 because Adkins, II's solar-powered fan is "portable and modular in construction," "inexpensive and easy to fabricate," and easy to install (Adkins, II col. 2, ll. 19-23, 27-28). Thus, the Examiner has not relied on impermissible hindsight in proposing the rejection, rather, he has relied on explicit disclosures of the prior art.

Moreover, we are not persuaded by Appellants' argument that they were the first to recognize the power infrastructure problem with landfills (i.e., lack of hard-wiring) and provide a solution to the problem (i.e., solar-powered fans). Adkins, II clearly demonstrates, by his disclosure of solar-powered exhaust fans, that the art recognized the problem of insufficient power infrastructure for exhaust fans and provided the solution: solar-

powered exhaust fans that do not require hard-wiring to an electrical infrastructure.

Additionally, to the extent that Appellants seek to limit the obviousness inquiry to their “problem” (i.e., lack of power infrastructure in landfills), Appellants’ argument is foreclosed by *KSR*, 127 S. Ct. at 1742, 82 USPQ2d at 1398. Moreover, Appellants’ argument regarding their “problem” was foreclosed prior to *KSR*. *See, In re Dillon*, 919 F.2d 688, 16 USPQ2d 1897 (Fed. Cir. 1990) (*en banc*) (diesel composition invented to reduce pollution on burning held obvious because same composition would have been obvious to reduce freezing in valves when diesel pumped during cold weather) and *In re Kemps*, 97 F.3d 1427, 1430, 40 USPQ2d 1309, 1311 (Fed. Cir. 1996) (*explaining* reason to combine prior art references does not have to be identical to that of the applicant to establish obviousness).

For the foregoing reasons, we conclude that it would have been obvious to one of ordinary skill in the art to have substituted Adkins, II’s solar-powered exhaust fan for Longo, Sr.’s blower 28 in his method and apparatus for removing methane from landfill wells because Adkins, II’s fans are “portable and modular in construction,” “inexpensive and easy to fabricate,” and easy to install (Adkins, II col. 2, ll. 19-23, 27-28).

Accordingly, we affirm the Examiner’s § 103(a) rejection of argued claims 9 and 15 and non-argued claims 12-14, 17, and 18 over Longo, Sr. in view of Adkins, II.

NON-ARGUED § 103(a) REJECTIONS

Appellants have not separately argued the following § 103(a) rejections: (1) the § 103(a) rejection of claims 6 and 8 over Adkins, II in

view of Staler; (2) the § 103(a) rejection of claims 11, 16, and 20 over Longo, Sr. in view of Adkins, II and Staler; and (3) the § 103(a) rejection of claims 10 and 19 over Longo, Sr. in view of Adkins, II and further in view of Finley, West, or Bates. Rather, Appellants contend that these rejections should be reversed for the same reasons that the rejections of independent claims 1, 9, and 15 should be reversed (Br. 4, 7).

We are unpersuaded by Appellants' arguments regarding independent claims 1, 9, and 15 for the reasons indicated above. Therefore, for the same reasons, we affirm: the Examiner's § 103(a) rejection of claims 6 and 8 over Adkins, II in view of Staler; the §103(a) rejection of claims 11, 16, and 20 over Longo, Sr. in view of Adkins, II and Staler; and the § 103(a) rejection of claims 10 and 19 over Longo, Sr. in view of Adkins, II and further in view of Finley, West, or Bates.

DECISION

We have affirmed the §§ 102(b)/103(a) rejections of claims 1-3, and 7 over Adkins, II.

We have affirmed the § 103(a) rejection of claims 6 and 8 over Adkins, II in view of Staler.

We have affirmed the § 103(a) rejection of claim 5 over Adkins, II in view of Finley, West, or Bates.

We have affirmed the § 103(a) rejection of claims 9, 12-15, 17, and 18 over Longo, Sr. in view of Adkins, II.

We have affirmed the § 103(a) rejection of claims 11, 16, and 20 over Longo, Sr. in view of Adkins, II and Staler.

Appeal 2006-2311
Application 10/676,593

We have affirmed the § 103(a) rejection of claims 10 and 19 over Longo, Sr. in view of Adkins, II, in further view of Finely, West, or Bates.

The Examiner's decision is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1)(iv)(2006).

AFFIRMED

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